



Missouri Department of Natural Resources  
Division of State Parks  
800-334-6946

## 2004 Mastodon Visitor Count

### Frequencies

The following tables indicate the overall frequency and percentage of observations by location, category of vehicle, type of vehicle, in-state or out-of-state license, and whether or not the user indicated visiting the "other side" of the site during the survey period. The columns of most importance are the "Frequency" (total number of observations) and "Valid Percent" columns. For instance, in the following table "Location of count", a total of 277 vehicles were surveyed, 92 of which, or 33.2%, were surveyed at the museum entrance.

**Location of count**

|       |                       | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|-----------------------|-----------|---------|---------------|--------------------|
| Valid | Museum entrance       | 92        | 33.2    | 33.2          | 33.2               |
|       | Day-use area entrance | 185       | 66.8    | 66.8          | 100.0              |
|       | Total                 | 277       | 100.0   | 100.0         |                    |

**Category of vehicle**

|       |                         | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|-------------------------|-----------|---------|---------------|--------------------|
| Valid | Visitor-related vehicle | 262       | 94.6    | 94.6          | 94.6               |
|       | Park-related vehicle    | 15        | 5.4     | 5.4           | 100.0              |
|       | Total                   | 277       | 100.0   | 100.0         |                    |

**Type of vehicle**

|       |              | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|--------------|-----------|---------|---------------|--------------------|
| Valid | Car          | 126       | 45.5    | 45.5          | 45.5               |
|       | Pickup truck | 55        | 19.9    | 19.9          | 65.3               |
|       | SUV          | 47        | 17.0    | 17.0          | 82.3               |
|       | Van          | 40        | 14.4    | 14.4          | 96.8               |
|       | RV           | 1         | .4      | .4            | 97.1               |
|       | Motorcycle   | 2         | .7      | .7            | 97.8               |
|       | Bus          | 2         | .7      | .7            | 98.6               |
|       | Other        | 4         | 1.4     | 1.4           | 100.0              |
|       | Total        | 277       | 100.0   | 100.0         |                    |

### In-state or out-of-state license

|         |                      | Frequency | Percent | Valid Percent | Cumulative Percent |
|---------|----------------------|-----------|---------|---------------|--------------------|
| Valid   | Missouri license     | 266       | 96.0    | 96.7          | 96.7               |
|         | Out-of-state license | 9         | 3.2     | 3.3           | 100.0              |
|         | Total                | 275       | 99.3    | 100.0         |                    |
| Missing | System               | 2         | .7      |               |                    |
| Total   |                      | 277       | 100.0   |               |                    |

### Did you or will you be visiting the museum/picnic area today?

|          |        | Frequency | Percent | Valid Percent | Cumulative Percent |
|----------|--------|-----------|---------|---------------|--------------------|
| Valid    | Yes    | 62        | 22.4    | 23.7          | 23.7               |
|          | No     | 200       | 72.2    | 76.3          | 100.0              |
|          | Total  | 262       | 94.6    | 100.0         |                    |
| Missing* | System | 15        | 5.4     |               |                    |
| Total    |        | 277       | 100.0   |               |                    |

\*Park-related vehicles were not included in this tabulation.

## Means

This table reports the overall mean number of people and number of axles, by category of vehicle (visitor-related vs. park-related). The overall mean number of people per visitor vehicle is 2.11, and the overall mean axle count is 2.00.

### Report

| Category of vehicle     |                | PEOPLE | Number of axles |
|-------------------------|----------------|--------|-----------------|
| Visitor-related vehicle | Mean           | 2.11   | 2.00            |
|                         | N              | 262    | 262             |
|                         | Std. Deviation | 1.879  | .000            |
| Park-related vehicle    | Mean           | 1.20   | 2.00            |
|                         | N              | 15     | 15              |
|                         | Std. Deviation | .561   | .000            |
| Total                   | Mean           | 2.06   | 2.00            |
|                         | N              | 277    | 277             |
|                         | Std. Deviation | 1.843  | .000            |

## Crosstabs

These tables compare frequencies and percentages between survey locations. For instance, the following table compares the frequency and percentage of visitor-related vehicles vs. park-related vehicles at the museum entrance and at the day-use area entrance. Ninety-one percent (91.3%) of the vehicles surveyed at the museum entrance were visitor-related vehicles, while 8.7% were park-related vehicles; whereas, 96.2% of vehicles surveyed at the day-use area were visitor-related vehicles, while 3.8% were park-related vehicles. I think, in the past, Mastodon has been overestimating the percentage of park-related vehicles crossing the vehicle counters and thus underestimating visitor vehicles.

**Category of vehicle \* Location of count Crosstabulation**

|                     |                            |                            | Location of count |                       | Total  |
|---------------------|----------------------------|----------------------------|-------------------|-----------------------|--------|
|                     |                            |                            | Museum entrance   | Day-use area entrance |        |
| Category of vehicle | Visitor-related vehicle    | Count                      | 84                | 178                   | 262    |
|                     |                            | % within Location of count | 91.3%             | 96.2%                 | 94.6%  |
|                     | Park-related vehicle       | Count                      | 8                 | 7                     | 15     |
|                     |                            | % within Location of count | 8.7%              | 3.8%                  | 5.4%   |
| Total               | Count                      |                            | 92                | 185                   | 277    |
|                     | % within Location of count |                            | 100.0%            | 100.0%                | 100.0% |

**In-state or out-of-state license \* Location of count Crosstabulation**

|                                  |                            |                            | Location of count |                       | Total  |
|----------------------------------|----------------------------|----------------------------|-------------------|-----------------------|--------|
|                                  |                            |                            | Museum entrance   | Day-use area entrance |        |
| In-state or out-of-state license | Missouri license           | Count                      | 87                | 179                   | 266    |
|                                  |                            | % within Location of count | 95.6%             | 97.3%                 | 96.7%  |
|                                  | Out-of-state license       | Count                      | 4                 | 5                     | 9      |
|                                  |                            | % within Location of count | 4.4%              | 2.7%                  | 3.3%   |
| Total                            | Count                      |                            | 91                | 184                   | 275    |
|                                  | % within Location of count |                            | 100.0%            | 100.0%                | 100.0% |

**Did you or will you be visiting the museum/picnic area today? \* Location of count Crosstabulation**

|   |     |                            | Location of count |                       |        |
|---|-----|----------------------------|-------------------|-----------------------|--------|
|   |     |                            | Museum entrance   | Day-use area entrance | Total  |
| Did you or will you be visiting the museum/picnic area today? | Yes | Count                      | 26                | 36                    | 62     |
|   |     | % within Location of count | 31.0%             | 20.2%                 | 23.7%  |
|   | No  | Count                      | 58                | 142                   | 200    |
|   |     | % within Location of count | 69.0%             | 79.8%                 | 76.3%  |
| Total   |     | Count                      | 84                | 178                   | 262    |
|   |     | % within Location of count | 100.0%            | 100.0%                | 100.0% |

## Means

This table compares the minimum, maximum, and mean number of people and axles per vehicle category, by location of survey. For instance, the mean number of people per visitor-related vehicle at the museum entrance is 2.54, whereas the mean number of people per visitor-related vehicle at the day-use area is 1.90. The standard deviation for the mean number of people for both the museum entrance and the day-use entrance is fairly high, which indicates there was a lot of variance in the number of people observed per visitor vehicle. This variance can be seen when looking at the minimum and maximum number of people reported per visitor vehicle. The minimum number of people per visitor-related vehicle for both entrances is one, the maximum number for the museum is 17, and the maximum for the day-use area is 19. Based on this variance, I think it would be safe to use a multiplier of at least 2 at the day-use area and a multiplier of at least 2.6 at the museum area. However, I am concerned that this may be an underestimation considering there were only two buses surveyed. A survey in the spring when school groups begin their field trips may increase the mean number of people per visitor vehicle and yield a more accurate depiction of visitation.

### Report

| Category of vehicle     | Location of count     |                | PEOPLE | Number of axles |
|-------------------------|-----------------------|----------------|--------|-----------------|
| Visitor-related vehicle | Museum entrance       | Mean           | 2.54   | 2.00            |
|                         |                       | N              | 84     | 84              |
|                         |                       | Std. Deviation | 2.097  | .000            |
|                         |                       | Minimum        | 1      | 2               |
|                         |                       | Maximum        | 17     | 2               |
|                         | Day-use area entrance | Median         | 2.00   | 2.00            |
|                         |                       | Mean           | 1.90   | 2.00            |
|                         |                       | N              | 178    | 178             |
|                         |                       | Std. Deviation | 1.736  | .000            |
|                         |                       | Minimum        | 1      | 2               |
|                         |                       | Maximum        | 19     | 2               |
|                         | Total                 | Median         | 1.00   | 2.00            |
|                         |                       | Mean           | 2.11   | 2.00            |
|                         |                       | N              | 262    | 262             |
|                         |                       | Std. Deviation | 1.879  | .000            |
|                         |                       | Minimum        | 1      | 2               |
| Park-related vehicle    | Museum entrance       | Maximum        | 19     | 2               |
|                         |                       | Median         | 2.00   | 2.00            |
|                         |                       | Mean           | 1.00   | 2.00            |
|                         |                       | N              | 8      | 8               |
|                         |                       | Std. Deviation | .000   | .000            |
|                         | Day-use area entrance | Minimum        | 1      | 2               |
|                         |                       | Maximum        | 1      | 2               |
|                         |                       | Median         | 1.00   | 2.00            |
|                         |                       | Mean           | 1.43   | 2.00            |
|                         |                       | N              | 7      | 7               |
|                         | Total                 | Std. Deviation | .787   | .000            |
|                         |                       | Minimum        | 1      | 2               |
|                         |                       | Maximum        | 3      | 2               |
|                         |                       | Median         | 1.00   | 2.00            |
|                         |                       | Mean           | 1.20   | 2.00            |
|                         |                       | N              | 15     | 15              |

|       |                       |                |       |      |
|-------|-----------------------|----------------|-------|------|
| Total | Museum entrance       | Std. Deviation | .561  | .000 |
|       |                       | Minimum        | 1     | 2    |
|       |                       | Maximum        | 3     | 2    |
|       |                       | Median         | 1.00  | 2.00 |
|       |                       | Mean           | 2.40  | 2.00 |
|       |                       | N              | 92    | 92   |
|       | Day-use area entrance | Std. Deviation | 2.049 | .000 |
|       |                       | Minimum        | 1     | 2    |
|       |                       | Maximum        | 17    | 2    |
|       |                       | Median         | 2.00  | 2.00 |
|       |                       | Mean           | 1.89  | 2.00 |
|       |                       | N              | 185   | 185  |
|       | Total                 | Std. Deviation | 1.711 | .000 |
|       |                       | Minimum        | 1     | 2    |
|       |                       | Maximum        | 19    | 2    |
|       |                       | Median         | 1.00  | 2.00 |
|       |                       | Mean           | 2.06  | 2.00 |
|       |                       | N              | 277   | 277  |
|       |                       | Std. Deviation | 1.843 | .000 |
|       |                       | Minimum        | 1     | 2    |
|       |                       | Maximum        | 19    | 2    |
|       |                       | Median         | 2.00  | 2.00 |